Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Proposed Changes in the Commission's Rules	)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency	)	(Terminated)
Electromagnetic Fields	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and	)	(Terminated)
Policies	)	
	)	
Targeted Changes to the Commission's Rules	)	ET Docket No. 19-226
Regarding Human Exposure to Radiofrequency	)	
Electromagnetic Fields	)	

July 20, 2020

REPLY COMMENTS BY NINA BEETY

Current FCC exposure guidelines exist on a shaky foundation. Raising them four times to accommodate 5G is unsupportable.

In 1984, the EPA proposed maximum permissible exposure levels of 100 uW/cm2 – 1/10 of ANSI/IEEE guidelines and current FCC limits.[i] This recommendation was based on EPA research and that of others and was concurred with by all representatives of the EPA except one department.

In a 1993 letter to the FCC, Margo Oge, EPA Director of the Office of Radiation and Indoor Air wrote:
"The FCC should not adopt the 1992 ANSI/IEEE standard. There are serious flaws in the standard that call into question whether the proposed use of 1992 ANSI/IEEE is sufficiently protective…c) The 1992 ANSI/IEEE conclusion that there is no scientific data indicating that certain subgroups of the population are more at risk than others is not supported by NCRP and EPA reports….d) The thesis that the 1992 ANSI/IEEE recommendations are protective of all mechanisms of interaction is unwarranted because the adverse effects level in the 1992 ANSI/IEEE standard is based on a thermal effect…3. The FCC should consider requesting that the NCRP revise its 1986 report to provide an updated, critical, and comprehensive review of the biological effects on RF radiation and recommendations for exposure criteria..."

The limitations of ANSI/IEEE-based guidelines was reiterated in 2002 by EPA Norbert Hankin[ii]:
"The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection (ICNIRP), are thermally based, and do not apply to chronic, nonthermal exposure situations. They are believed to protect against injury that . . .

result(s) in tissue heating or electric shock and burn. . . The FCC's exposure guideline is considered protective of effects arising from a thermal mechanism. . . the generalization by many that the guidelines protect human beings from harm by any and all mechanisms is not justified."

They don't pertain to cumulative exposure, long-term exposure, exposure to vulnerable populations, non-thermal biological or environmental effects, interference with medical devices, effects on those with metal implants or those with nerve damage.

Nevertheless, exposure guidelines which were intended to be temporary due to their shortcomings were adopted and became permanent. The EPA never issued federal exposure guidelines due political commandeering of the process, and the EPA was stripped of funding and personnel to stop ongoing non-ionizing radiation research.

Current FCC levels are 10 times 1983 EPA recommendations. FCC now proposes 5G.levels that are 40-200 times 1983 EPA recommendations, up to millions of times higher than recommended by health professionals and independent EMF researchers[iii], and trillions of times higher than levels that effect health.[iv]

There is no scientific basis for increasing FCC limits 4 times for 5G frequencies. This is a business decision in order to deploy 5G. FCC justification to increase occupational exposure from 5 to 20 mW/cm2 treats its own 1-5 ratio as holy writ, which is baseless.

The FCC's shoddy and reckless work, masquerading as science, is a complete violation of the public trust.

And why are there no environmental standards?

In 2018, Dr. Paul Héroux testified to the Michigan House Energy Policy Committee about IEEE C95 exposure guidelines:[v]

"I don't know how you can support the deployment of 5G – a new cellular system that will seriously enhance human exposure to electromagnetic radiation – when you know what Dr.[Sharon] Goldberg just told you. And you know that the modulation that is introduced by 5G is a new threat on biological systems.

We used to have frequency domain multiple access, time domain multiple access, code domain multiple access, and now we have 5G beam-forming – all data compaction strategy that maximize the biological impact of this radiation. In other words, it's going to get a lot worse with this deployment.

You know that all human cancers (and I use cancer as the, so to speak, the example here, although there's many health effects from this radiation, because it's the most closely documented, because we have a long history, bad history, with cancer) all human cancers – leukemia, colon, breast cancer, lung cancer – respond to electromagnetic radiation levels 100s of times below the FCC recommendations… [The FCC] take their marching orders from the Institute of Electrical [and] Electronics Engineers. And while this institution was setting the standards, I was present, and I know how lightheartedly they suppress any information that would impair the

development of their applications. They just didn't want to hear about it. So, it was never considered."

Cherry picking the science. War-gaming the science. Harming the public. Killing the earth.

Even the private German non-governmental group ICNIRP says:
"People being protected
Different groups in a population may have differences in their ability to tolerate a particular NIR exposure. For example, children, the elderly, and some chronically ill people might have a lower tolerance for one or more forms of NIR exposure than the rest of the population. Under such circumstances, it may be useful or necessary to develop separate guideline levels for different groups within the general population, but it may be more effective to adjust the guidelines for the general population to include such groups. Some guidelines may still not provide adequate protection for certain sensitive individuals nor for normal individuals exposed concomitantly to other agents, which may exacerbate the effect of the NIR exposure, an example being individuals with photosensitivity. Where such situations have been identified, appropriate specific advice should be developed within the context of scientific knowledge. …[vi]

The FCC ignores it all.

The FCC has violated the Administrative Procedures Act 552(a)(1)(A) and (D) in this proceeding. General Counsel Thomas Johnson[vii] and Commissioner Brendan Carr[viii] declared that 5G is safe, NPRM notwithstanding. Their declarations were not posted in the Federal Register. The public was not informed that it had to go to the Washington Post and Twitter to get all information and background on this proceeding.

Their prejudicial statements show that 13-84 and 19-226 are ruses and sham proceedings. The decisions have already been made and announced at the top level. The FCC has misled the public that they had any input on the matter. They do not. Carr and Johnson's statements are likely the tip of the iceberg. The silence by other FCC personnel shows these represent agency positions and also function to bully other members of the Commission into misconduct.

The first obligation of the FCC is promoting the safety of life and property:
47 U.S. Code § 332 - Mobile services
"(a) Factors which Commission must consider In taking actions to manage the spectrum to be made available for use by the private mobile services, the Commission shall consider, consistent with section 151 of this title, whether such actions will—
(1) promote the safety of life and property;"

Senior FCC officers publicly declare that evidence, data, and requests for public-protective action from research scientists, health professionals, public officials, and the public are conspiracy theories and hysteria. These top FCC officials publicly ridicule, stigmatize, and shame those who pro bono advise the FCC on public health and

environmental risks, and the very personal health problems they experience from wireless exposure.

The 2013 13-84 reply comments by Boston and Philadelphia is one example of expert comments disparaged as hysteria and conspiracy theories by top FCC personnel.

All evidence and hundreds of comments were swept aside in three remarkable sentences in ¶ 2.
“After reviewing the extensive record submitted in response to that inquiry, we find no appropriate basis for and thus decline to propose amendments to our existing limits at this time. We take to heart the findings of the Food & Drug Administration (FDA), an expert agency regarding the health impacts of consumer products, that “[t]he weight of scientific evidence has not linked cell phones with any health problems.”3 Despite requests from some to increase and others to decrease the existing limits, we believe they reflect the best available information concerning safe levels of RF exposure for workers and members of the general public, including inputs from our sister federal agencies charged with regulating safety and health and from well established international standards;”

and one sentence on children and public information ¶ 121:
“With respect to any special considerations for children and consumer information, we refer to the FDA website, which states that ‘[t]he scientific evidence does not show a danger to any users of cell phones from RF exposure, including children and teenagers.’”

There is no attempt by the FCC at any analysis of the lengthy and detailed information provided to the agency or any mention of the health and environmental hazards.

The FCC does not consider costs – national, state and local economic costs, personal financial costs, health costs, environmental costs, social costs, loss of income, loss of economic drivers, productivity costs, 5G surveillance, loss of Constitutionally-protected rights including privacy. They are not examined. The FCC does not consult public stakeholders including those disabled by electromagnetic sensitivity.

FCC personnel have not openly identified their conflicts of interest, including pensions and stock ownership connected to telecommunications companies, affiliated groups, law firms, and/or marketing and media companies. The FCC bios of commissioners do not contain this information. No bios are posted of the managing directors, general counsel, and other staff members, so that the public might be informed. Which commissioners have recused themselves on decisions that could affect the profitability of their pension, stock, or other benefits?

It is doubtful that the FCC, primarily concerned with rolling out technologies, would allow a measurement standard that would accurately show exposure and provide some protective measure for health. With its conflict of interest through industry officials now occupying FCC commission seats, who is steering the ship? No one who is public

facing. It appears that the FCC's sole interest is in corporate persons. Human persons are irrelevant.

The FCC also disregards TCA Section 601(c) under Title VI:

> Title VI —EFFECT ON OTHER LAWS
> SEC. 601. APPLICABILITY OF CONSENT DECREES AND OTHER LAW.
> (c) FEDERAL, STATE, AND LOCAL LAW.—
> (1) NO IMPLIED EFFECT.—This Act and the amendments made by this Act shall not be construed to modify, impair, or supersede Federal, State, or local law unless expressly so provided in such Act or amendments.

FCC actions are done without consideration for impacts to those disabled by electromagnetic sensitivity and conflicts with ADA and the Fair Housing Act.

The transparency and integrity of this proceeding is irreparably compromised. It must suspended pending audit and public investigation.

Research and information I have cited are included by reference.

Sincerely,

/s/_____
Nina Beety
Monterey, California

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[i] https://microwavenews.com/news/backissues/s-o85issue.pdf
[ii] http://www.emrpolicy.org/litigation/case_law/docs/noi_epa_response.pdf
[iii] https://www.degruyter.com/view/j/reveh.2016.31.issue-3/reveh-2016-0011/reveh-2016-0011.xml
EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses
[iv] http://www.electromagnetic-pollution.com/main/page_biological_effects_exposure_tables.html
[v] https://youtu.be/2JI7-9_FRYc
[vi] http://www.icnirp.org/cms/upload/publications/ICNIRPphilosophy.pdf
[vii] https://www.washingtonpost.com/opinions/2020/06/04/5g-conspiracy-theories-threaten-us-reco very/ and Twitter
[viii] Twitter and cited in https://www.fiercewireless.com/regulatory/carr-5g-upgrade-order-will-make-antenna-swaps-faster-more-predictable